

Utah State University

DigitalCommons@USU

All Graduate Theses and Dissertations

Graduate Studies

5-2014

Training Staff Members to Conduct and Implement the Multiple Stimulus Without Replacement (MSWO) Preference Assessment Using Video Modeling

Heather M. Merkley
Utah State University

Follow this and additional works at: <https://digitalcommons.usu.edu/etd>



Part of the [Special Education and Teaching Commons](#)

Recommended Citation

Merkley, Heather M., "Training Staff Members to Conduct and Implement the Multiple Stimulus Without Replacement (MSWO) Preference Assessment Using Video Modeling" (2014). *All Graduate Theses and Dissertations*. 3572.

<https://digitalcommons.usu.edu/etd/3572>

This Thesis is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Theses and Dissertations by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.



TRAINING STAFF MEMBERS TO CONDUCT AND IMPLEMENT THE MULTIPLE
STIMULUS WITHOUT REPLACEMENT (MSWO) PREFERENCE
ASSESSMENT USING VIDEO MODELING

by

Heather Merkley

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Special Education

Approved:

Thomas Higbee, PhD
Major Professor

Timothy Slocum, PhD
Committee Member

Kimberly Snow
Committee Member

Mark R. McLellan, PhD
Vice President for Research and
Dean of the School of Graduate Studies

UTAH STATE UNIVERSITY
Logan, Utah

2014

Copyright © Heather Merkley, 2014

All Rights Reserved

ABSTRACT

Training Staff Members to Conduct and Implement the Multiple Stimulus

Without Replacement (MSWO) Preference

Assessment Using Video Modeling

by

Heather M. Merkley, Master of Science

Utah State University, 2014

Major Professor: Dr. Thomas Higbee

Department: Special Education and Rehabilitation

Those who teach individuals with special needs sometimes find it difficult to train the members of their staff to conduct various teaching strategies. This study examined the effect of video modeling on the fidelity of implementation of the multiple stimulus without replacement preference assessment. Participants in this study were paraprofessionals who work with preschoolers who have developmental disabilities. The targeted behaviors examined were the percentage of skills gained and correctly used by the participants. The procedure that was used to train participants was video modeling. The results of this study showed that participants were able to acquire the necessary skills to correctly implement the MSWO with using the video-model.

(33 pages)

PUBLIC ABSTRACT

Training Staff Members to Conduct and Implement the Multiple Stimulus

Without Replacement (MSWO) Preference

Assessment Using Video Modeling

by

Heather M. Merkley

For many educators, finding enough time to complete all that is required of them is a daily challenge. Those in special education have the added burden of making sure that their staff members are highly trained in the skills required to work effectively with students. There are many different ways to train staff members, one of which is using a video model. This study looked at the effects of video modeling alone on the training of staff members to use the multiple stimulus without replacement preference assessment. The participants in this study were paraprofessionals who work with preschool students who had a variety of disabilities. Data were collected on how well staff members were able to perform necessary skills to conduct the preference assessment before and after watching a video model. The results of this study showed that staff members could learn a new skill with the use of video modeling as a training tool. Using video modeling as a training tool is an effective way to save educators time while still ensuring that students are benefited.

CONTENTS

	Page
ABSTRACT.....	iii
PUBLICA ABSTRACT.....	iv
LIST OF FIGURES	vi
INTRODUCTION	1
LITERATURE REVIEW	4
METHOD	9
RESULTS AND DISCUSSION	16
REFERENCES	23
APPENDICES	25
Appendix A: Preference Assessment Data Sheet.....	26
Appendix B: Directions to Conduct the Multiple Stimulus Without Replacement Preference Assessment	27

LIST OF FIGURES

Figure		Page
1	Data on participants who were at or near criterion and did not warrant treatment phase.....	17
2	Data of participants who required treatment	18

INTRODUCTION

As humans we are motivated to accomplish tasks based on the reinforcer that will be received. This is especially true for those with special needs inside the school setting. However, because each person is a unique individual, what will motivate and ultimately reinforce behavior will differ from person to person. For those who have disabilities, especially those with language delays, it can be difficult to know exactly what will motivate him or her to engage in various task demands. Because of this issue, researchers over the past several years have examined methods to help identify potential reinforcers for those with special needs of varying ages. These assessments have been coined as “preference assessments” (DeLeon & Iwata, 1996; Fisher et al., 1992). It is important to note that preferences often change from day to day or even hour to hour. Therefore, preference assessments have been developed so that they can be conducted and completed on a regular basis.

Preference assessments consist of four general types—free operant, paired stimulus (PS), multiple stimulus (MS) and multiple stimulus without replacement (MSWO). The free operant preference assessment consists of the therapist observing an individual for a period of time and recording the duration that the individual engages with each stimulus (Roane, Vollmer, Ringdahl & Marcs, 1998). The advantages of this method include ease of implementation and derives a general idea of reinforcing stimuli for that individual. However, it may only produce one reinforcer and does not produce a hierarchy of possible reinforcers. The PS method pairs each stimulus being tested with all the other stimuli. This method produces a great hierarchy of potential reinforcers, but is very time consuming (Fisher et al., 1992). For the MS method, an array of stimuli is

presented, and data is kept on which stimulus is chosen. This method can identify highly motivating stimuli in a relatively quick amount of time but may not create a hierarchy (Windsor, Piche, & Locke, 1994). The MSWO method utilizes the MS method of presenting an array of stimuli, but once an item is chosen, it is no longer part of the array. Therefore, not only does the MSWO method produce a hierarchy of potentially reinforcing stimuli, but it also can be done in relatively little time (Carr, Nicolson, & Higbee, 2000; DeLeon & Iwata, 1996). Because MSWO produces a hierarchy of reinforcing stimuli in a short period of time, it may be a preferred choice in a classroom setting where time is of the essence.

Since reinforcement plays a key role in teaching students with disabilities, it is important that those who work with students know and understand how to conduct these assessments. However, like most assessments, conducting preference assessments takes time and a certain skill set. Teachers who educate those with special needs are already pressed for time with all that is required of them by law (IDEA, 2004). Unlike other assessments that need to be conducted by teachers or specialists, preference assessments can and should be conducted by all who work with students. By teaching other staff members (i.e., instructional assistants or paraprofessionals) to conduct preference assessments, teacher time can be freed up to allow their focus to be on other important aspects of teaching (Haberlin, Beauchamp, Agnew, & O'Brien, 2012; Jahr, 1998; Lavie & Sturmey, 2002; Roscoe & Fisher, 2008). However, the training (lecture, video clips, feedback, written instructions) that has been used to educate staff members to conduct the assessments requires a lot of time from the teacher or supervisor to prepare, present, and instruct (Lavie & Sturmey, 2002; Roscoe & Fisher, 2008; Roscoe, Fisher, Glover &

Volkert, 2006). This format also may limit the number of individuals who can be trained and when they can be trained.

It has been suggested in several studies that staff members can learn new skills by just viewing a video model of the procedure (Catania, Almeida, Liu-Constant, & Digennaro, 2009; Collins, Higbee, & Salzberg, 2009; Moore & Fisher, 2007). Video modeling is a training method found to be quick and effective. This is important since teachers need a way to train staff members that is both fast and effective in order to ensure the best possible education for those with developmental disabilities. Several studies have researched the efficiency of using video modeling to teach a variety of individuals who work with those with disabilities how to do a wide range of different skills. The following literature review will examine some of these studies and show that video modeling can be effective as a training tool.

LITERATURE REVIEW

The databases used to locate the articles used in this review included Google Scholar, ERIC, and Academic Premier via EBSCOhost. Terms used in the search engines were “staff training and preference assessments,” “preference assessments,” “staff training in special education,” and “identifying reinforcers.” A total of seven articles were identified as appropriate for inclusion in this proposal. Articles were chosen based on the following criteria:

1. Staff training on preference assessments with individuals with disabilities
2. The types of preference assessments used
3. If preference assessment methods were compared
4. The training methods used to train staff members
5. Video modeling used to train staff members

Lavie and Sturmey (2002) were some of the first researchers to study the training of staff members to conduct a preference assessment. They trained three special education teacher assistants to conduct the PS preference assessment with eight preschool-aged children with autism. Sessions were conducted in a classroom with materials necessary to conduct the preference assessment. In order to train staff members, the researchers task analyzed the steps needed to conduct an effective PS preference assessment and then created a checklist. A multiple baseline design was used in order to establish experimental control. While participants were in baseline (pre-treatment sessions), they were instructed to determine what a student liked. Once training began, the participant was given the checklist and each step was explained. Using video modeling, each participant was shown how to perform all the steps. Each participant then

practiced conducting the assessment with a child while receiving feedback from the researchers. Data were taken on the percentage of correct steps performed. Competency was reached once the participant performed 85% of the steps correctly across two sessions.

The results of this study showed that staff members could be taught to effectively conduct a PS preference assessment after approximately 1 ½ hr of training, which is time that the supervisor is required to invest in order to just train those few participants. This study used video modeling as one component a treatment package but it is not clear what component strategy used was most effective for the participants' skill acquisition. This prompts one to question whether all those steps are necessary for staff training. However, in recent years, studies have examined the effects of video modeling alone on the skill acquisition of staff members on a variety of other skills.

In 2009, Collins and colleagues used video modeling to instruct direct-care staff members how to implement a problem solving intervention with clients. Six staff members, who had worked at the program facility for at least 2 months, participated in this study. The facility used a specific problem solving intervention consisting of seven steps that participants were to use. These steps could be followed in any order. Data were collected on whether or not the participant implemented each step correctly. The experimental design was a non-concurrent multiple baseline with the participants split into 2 groups. Baseline consisted of participants engaging in a role play to which the problem solving intervention was practiced. During baseline, participants had access to written instructions. In the treatment condition, participants viewed a video model of the different steps of the intervention and engaged in the role play once again.

The results indicated that, despite having written instructions, participants' ability to correctly implement the intervention during baseline was low. It was not until after viewing the video model that participants were able to correctly implement the intervention steps. Most participants had to view the video model multiple times to meet criterion, but because it was a video and easily accessible, participants could view it until they met criterion. Typically, lectures are a one-time experience, and many people do not acquire new skill the first time. The ability for staff members to view a video multiple times to ensure that they understand what is being asked of them is one benefit of using video modeling as a teaching tool.

Another study that examined the effects of video modeling on staff training was completed by Moore and Fisher in 2007. In this study, they instructed 3 participants with BA degrees in psychology in the methodology of functional analysis using 3 different training methods (lecture, partial video model, and full video model). The experimental design consisted of each participant conducting the 3 different conditions of a functional analysis in a simulated setting as well as in a natural setting. Data were taken on the percentage of correct responses demonstrated by the participants. Prior to baseline, participants were given written instructions on how to conduct a functional analysis. Baseline sessions were conducted in simulated and natural settings where no further instruction other than how to run the different conditions of the functional analysis were provided.

During treatment sessions, three different training methods were used—lecture on how to conduct one of the conditions, partial video model on how to conduct another conditions, and finally full video modeling on how to conduct the final condition. The

lecture condition described why and how to implement a condition of the functional analysis, the partial video model demonstrated about half of the behaviors needed to conduct a condition, and the full video model showed and described all the steps and possible behaviors demonstrated by the clients. Throughout the training, all participants received full video modeling of each condition if they did not meet criterion after lecture or partial video modeling.

Results of this study indicated that participants' accuracy in conducting the conditions was low during baseline. After hearing the lecture, accuracy increased slightly, and after viewing the partial video model, participants' skills increased to moderate levels but still did not meet criterion. It was not until they observed the full video model that participants met criterion in all conditions. These results show that the ability to observe exactly what skills and steps are needed to implement a specific assessment is critical for training staff effectively and efficiently. This study also indicates that video modeling is not just for basic behavior assessments or skills but can also be used to train staff members to successfully conduct more complex behavior intervention strategies.

A study completed in 2009 by Catania et al. used video modeling to train staff members on how to implement discrete trial instruction. The participants in this study consisted of three new employees of a private school for children and young adults with autism. A multiple baseline design was used and data were collected on the percentage of the 10 steps implemented correctly. During baseline, participants were given a brief explanation of the lesson plan they were to demonstrate, materials needed to conduct the lesson, and instructions to teach a lesson without any further directions. Training consisted of watching a video of the lesson they were told to conduct during baseline. A

voice-over script was integrated into the video in order to give more information on what participants were viewing. Ten minutes after viewing the video, participants conducted the lesson again.

The results indicated a large increase in participants' ability to use discrete trial instruction to teach a basic lesson plan observed in the video. Furthermore, generalization of skills viewed on the video was demonstrated in other lessons. This study demonstrates that viewing a video on one specific lesson plan not only improves skills needed to conduct that lesson but also teaches basic skills needed in order to conduct other lessons without needing further modeling. The ability to view a short video, replicate the model, and generalize it to other settings is a great advantage of video modeling.

As has been demonstrated above, there is a body of research that has shown that individuals can be trained, using video modeling alone, to effectively implement a variety of different skills. There is also a body of research that has demonstrated that video modeling can be used as part of a training package to teach individuals to conduct preference assessments. However, the body of research to date has yet to examine the effects of video modeling alone on teaching individuals to conduct preference assessments—more specifically the MSWO preference assessment.

Research Question

Is video modeling alone effective enough to train special education preschool staff members to conduct the MSWO preference assessment with young children with developmental disabilities?

METHOD

Participants

Seven female paraprofessionals between the ages of 22 and 60 years who work in a special education preschool classroom participated in this study. All had only been working in the classroom for less than two years. The participants were familiar with preference assessments in that they understood that these assessments are used to identify reinforcers for individuals with disabilities and that there are different types of preference assessments. However, none had used or been taught to use preference assessments of any kind. They all had a high school education, and 4 of the 7 participants have had some college experience. None of the participants had degrees in special education and only had “on the job” training.

Setting

Training sessions were conducted in a small room, approximately 2 m by 2 m, where the video was watched. The room was furnished with a table, chair and laptop. Implementation and baseline sessions were conducted in each student’s designated work space located in the classroom. The work space was a cubicle measuring approximately 2 m by 2.5 m. Each work area included chairs, a table, work materials, and items needed to conduct the MSWO.

Consent

As this study looked at common instructional practices, a letter of information

approved by the district was given to participants. The letter indicated the purpose of the study and described the training. Participants also were informed that they were not required to participate and could withdrawal without penalty.

A letter of information approved by the district was sent home with students to inform parents of the research on staff members' skill acquisition of the preference assessment would be taking place in the classroom and that no data would be kept on their child. They were also informed that video would be collected, but that their child's face would not be shown.

Dependent Variable

The dependent variable assessed in this study was the percentage of steps correctly preformed in a MSWO preference assessment. This included the number of steps correctly performed divided by the total steps required. Data was also collected on participants' ability to accurately fill out the MSWO datasheet.

Response Measurement

Data was taken on the percentage of steps correctly followed of the task analyzed steps developed by the researcher. The steps were as follows:

1. Lay out five stimuli in a row on the table in front of the student (0.7 m from one another and 0.7 from the student participant).
2. Tell the student to "pick one" and wait five s.
3. If the student touches a stimulus, remove all other stimuli immediately.
4. Let the student interact with chosen stimulus for 15 s.

5. After 15 s, remove stimulus from student by saying “all done”.
6. If using edibles, allow the student to consume the chosen stimulus.
7. Record the student’s choice on the datasheet by writing the number the stimulus was chosen (i.e. first one chosen write 1, second item chosen write 2).
8. Once data is marked, present the unchosen stimuli in front of the student making sure to rotate stimuli to the left.
9. Repeat steps two through eight until all the stimuli have been sampled.
10. Repeat the entire sequence (Steps one through nine) two more times for a total of 15 trials.
11. If the student approaches more than one stimulus, block him or her by holding down or moving the items out of reach.
12. Represent the trial. If the student makes one selection, continue steps two through eight.
13. If the student again reaches for multiple stimuli, block him or her by holding down or moving the stimuli out of reach, indicate on datasheet that multiple stimuli were chosen, and end trial.
14. If the student does not approach a stimulus after five s, remove all stimuli and prompt student to engage with each stimuli separately.
15. Repeat trial. If the student makes one selection, continue with steps two through eight.

16. If after representing student still does not choose a stimulus after five s, remove all stimuli, mark datasheet by marking all remaining stimuli as not selected, and end trial.
17. Once all 15 trials have been completed, add up the three numbers associated with each stimulus by when they were chosen.
18. Write this number in the appropriate location on the datasheet.
19. These numbers indicate how preferred an item is. The lowest number is the most preferred item, while the highest number is the least preferred item. (See Appendix A for datasheet.)

Each skill was listed on a datasheet and data was collected on if the behavior occurred or not using a + or -. If the skill was not applicable, it was not included in the overall total of responses.

Independent Variable

The independent variable for this study was the video model training video used to instruct participants to conduct the MSWO. The participants watched the video alone in the room described above. The video consisted of the researcher and staff assistant role-playing the assessment. The staff assistant was instructed to engage in behaviors that participants might come across when giving the assessment to students (e.g. choosing more than one item, not making a choice, and not giving up item). The video also included a segment on how to calculate the results and explained what they meant. The video was voiced over by the researcher to explain the different steps being demonstrated to accurately conduct the preference assessment.

Interobserver Agreement (IOA)

Research assistants comprised of teachers with experience in administering preference assessments served as observers. They collected IOA data on at least 40% of the training and implementation phases by analyzing previously recorded videos of the sessions. The researcher calculated IOA using the point-by-point method, by dividing the total number of agreements by the total number of agreements and disagreements then multiplied by 100 in order to get a percentage.

Treatment Integrity

An independent observer collected integrity data. The independent observer made note of if the researcher played the video for the participant, that the researcher did not answer any questions that the participants might have asked, and that the researcher did not provide feedback or give instructions to the participants.

The independent observer collected data for a minimum of 40% of the sessions. The researcher converted the data into a percentage by taking the number of correct critical components divided by the total number of critical component and multiplied by 100.

Experimental Design

A multiple baseline across participants design (Cooper, Heron, & Heward, 2007) was used in this study to evaluate the effects of the video modeling procedure on

participants' ability to conduct the assessment and use the results of the assessment. This method was chosen because the effects of skill acquisition cannot be reversed.

Procedure

Baseline

Baseline data were collected on participants' skills at identifying student's reinforcers by placing each participant in a room with a student, pencil and paper, and various items and telling the participant to find what the student prefers. Using the checklist and datasheet described above, the researcher collected data on how the participant determines what the student preferred. Each session was videotaped and later scored by researcher and research assistants. Prior to beginning the baseline sessions, participants were given minimal written instructions (see Appendix B) describing how to conduct the preference assessment. They had 20 min to review the instructions before beginning their baseline sessions. No other instructions were given to them. Each participant was given 15 minutes to conduct the preference assessment. The data collection system for baseline sessions was the same data collection system used for training and implementation sessions.

Training and Implementation

This section used the same steps and datasheet as used in baseline. These sessions were also filmed and later scored by the researcher and research assistants. Participants had the opportunity to review the minimal written instructions 10 minutes prior to viewing the video and implementation sessions. No further information was given to them. For the first two treatment sessions, each participant watched the video prior to

being asked to conduct the preference assessment using what they had learned. After the first two sessions, participants viewed the video before a session only if criterion (90% or higher accuracy rate) had not been reached with the previous session. If criterion had been met with the previous session, participants were not shown the video again. If criterion continued to not be met after viewing the video three times, the researcher gave coaching and feedback until criterion was met. This was only the case for Participant 4. Participants could take notes while watching the video, but they were not used during implementation sessions.

Following training and implementation, participants were given an open-ended social validity survey where they were asked to give feedback on what they liked and did not like about the video model intervention.

RESULTS AND DISCUSSION

The results of this study varied in how participants responded to the procedures put into place. During baseline, IOA was collected for 20% of the sessions for Participant 1 with 96% agreement. IOA was collected 40% of her treatment sessions with an average of 99% (range=99%-100%). Participant 2 had IOA collected on 8% of her baseline sessions with a fidelity agreement of 100%. During treatment, Participant 2 had 40% of the sessions had IOA collected with an average of 97.3% (range=96%-99%). During baseline for Participant 4, IOA data were collected for 28% of the sessions with an average of 97% (range= 94%-99%). IOA data was collected for Participant 4, 25% of treatment sessions with an average of 96% (range=95%-97%). Participant 6 had IOA data collected on 60% of her treatment sessions with 98% agreement.

IOA data were collected for Participant 3 on 50% of her sessions with an average of 96.5% (range=95%-99%). Participant 5 had IOA collected on 50% of her sessions with an average of 88% (range=86%-90%). IOA data was collected for Participant 7 on 66% of her sessions with an average of 97% (range=94%-100%).

Treatment integrity for Participants 1, 2, and 6 was collected on 20% of their sessions with a 100% fidelity rate. Participant 4 had treatment integrity data collected on 38% of her sessions with a fidelity rate of 100%. Participants 3, 5 and 7 showed an understanding of how to conduct the preference assessment with a mean of 80% during baseline. Their results are displayed in Figure 1. Since these participants were averaging close to criterion without further training, there was no need to move them to treatment and they were excluded from the remainder of the study.

Figure 2 displays the results for Participants 1, 2, 4 and 6. During baseline, these participants, on average, correctly conducted 61% of the steps of the preference assessment (13%-87%). After treatment, Participant 1 went from 77% to 96% and showed a steady trend throughout her four treatment sessions. Participant 2 was the

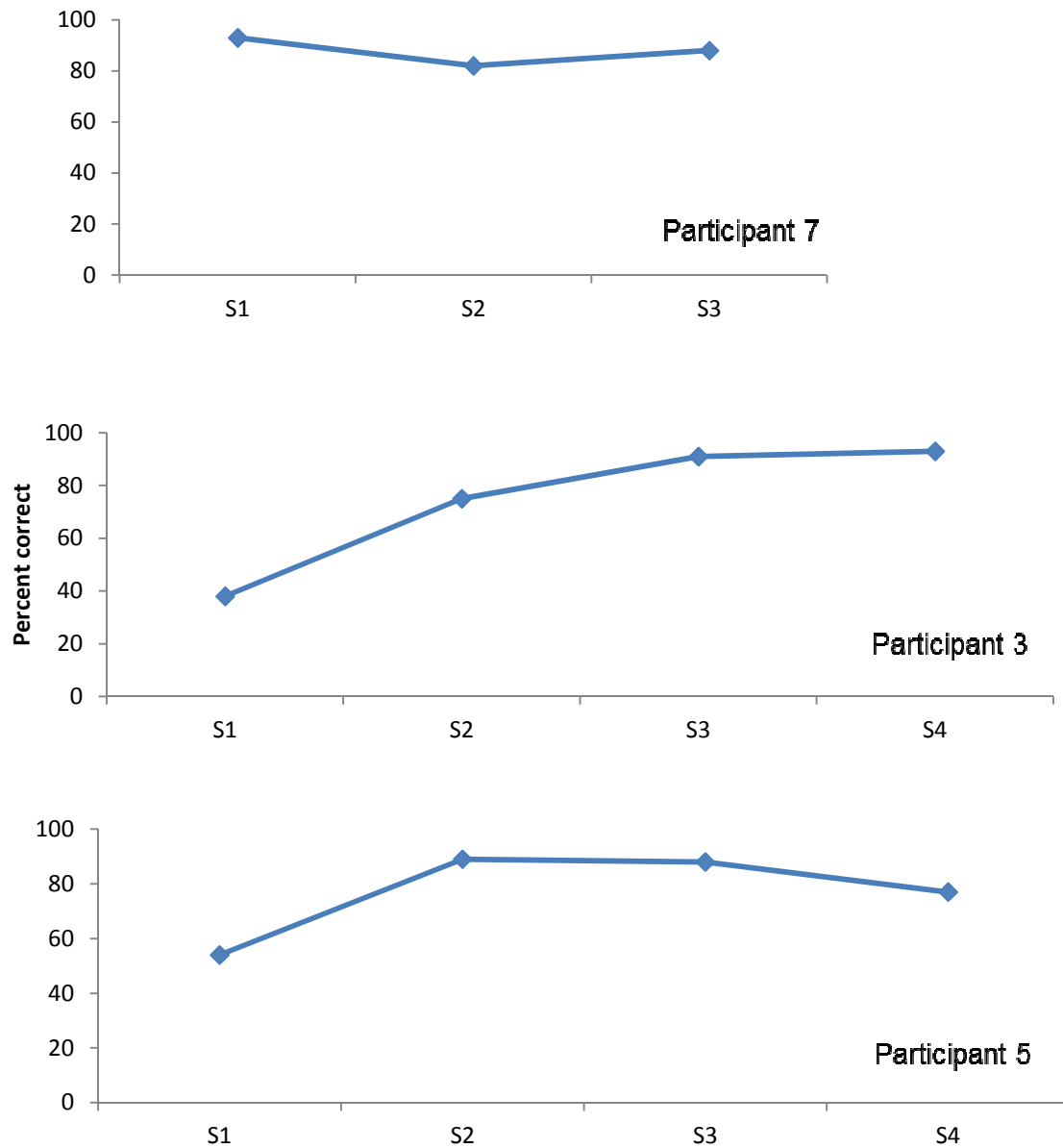


Figure 1. Data on participants who were at or near criterion and did not warrant treatment phase.

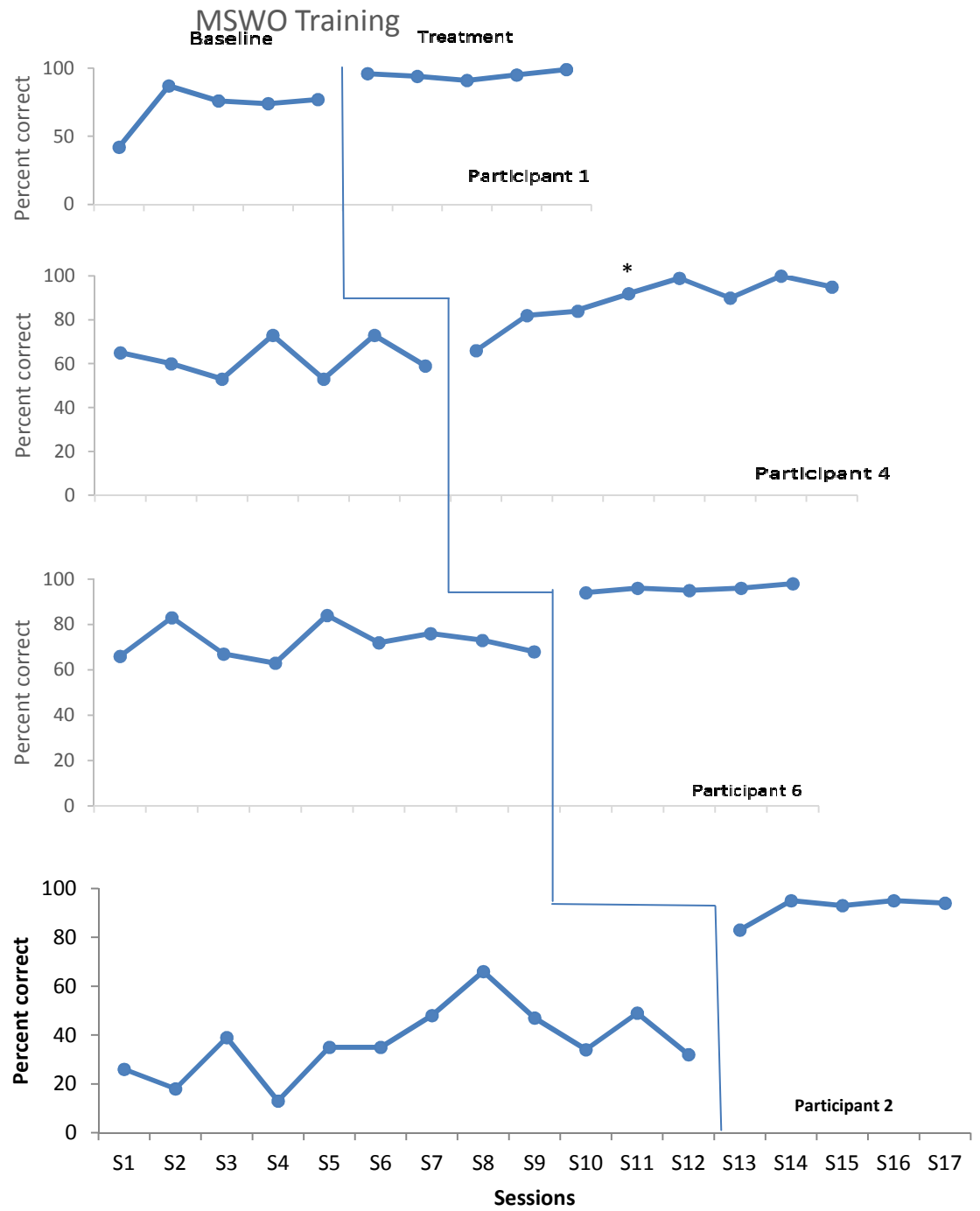


Figure 2: Data of participants who required treatment.

*Feedback given

longest in baseline (with 12 sessions) with an average of 37% and with significant variability in her ability to conduct the assessment accurately. Following treatment, Participant 2 jumped up to 83% and met and remained in criterion following the second viewing of the video. Participant 6 ranged from 63%-84% during her baseline sessions. Following treatment, Participant 6 met criterion and remained there. These participants had a mean of 94% following treatment. Participant 4 went from a mean of 62% and with a slightly variable trend during baseline to having a mean of 77% (66%-84%) after watching the video model. Since she still did not meet criterion after viewing the video three times, Participant 4 was moved to the feedback phase. After feedback on performance was given to Participant 4, her correctly implementing the preference assessment increased to a mean of 96% (90%-100%).

The results of this study have several different implications on the effects of training staff members and the use of video modeling. First, for three of the seven participants the video model was not needed to increase their skills at implementing the preference assessment. This suggests that for some staff members, written instructions may be sufficient to accurately conduct this type of assessment. It should also be noted that the datasheet used by participants was very specific for the data in which they were collecting, and therefore, may have aided in their ability to accurately conduct the assessment. If this was the case, it is good to point out that having a datasheet that can function as a job aide can help promote good treatment integrity across staff members.

Secondly, Participants 1 and 6 remained just below criterion during baseline. This shows that for some individuals written instruction are helpful for understanding the basic skills necessary, but that more information, in this case the video model, is needed in

order to learn the more specific skills required. Participant 2 remained well below criterion throughout baseline, but increased to well above criterion once shown the video model. These results indicate that a video model is an effective tool to adequately teach the necessary skills required to conduct the MSWO preference assessment.

However, for one participant, a video model was not effective enough to learn the correct skills. While Participant 4's skills did increase after watching the video, she was still slightly below criterion level. Once feedback was given to Participant 4, criterion was met. Overall, the study indicates that staff members can be taught to conduct the MSWO preference assessment using methods that require little support from supervisors, therefore, allowing supervisor to focus on other important tasks.

These results also show that little time is required for staff members to learn a new a valuable skill. The average session time was under 10 min. Participant 1 total amount of time spent in this study was 117 min with an average time of 9 min per session (range=6-9 min) during treatment. Participant 2 had a total amount of time of 175.5 min with time spent in treatment averaging 10 min (range=7-15 min). Participant 4 had a total time of 129.75 min with the average session time during treatment being 6.5 min (range=3.75 to 8 min). Finally, Participant 6 spent a total time of 191 min with treatment sessions averaging 10.75 min (range=7 to 15 min). It is important to note that Participants 1, 2, and 6 only watched the seven min video twice which indicates that it took them a total of 14 min to learn the new skill. Participant 4 had to watch the video four times and receive feedback for a total time of 33 minutes for her to learn the new skill. These results indicate that in as little as 20 min, staff members can learn new skills. By having these new skills to identify what reinforces a student, the staff members can now motivate their

students with special needs to learn vital skills as quickly as possible in order to access the same experiences as typical developing peers.

In the survey given to the participants, they agreed that the video model was helpful for them to learn how to implement this particular preference assessment, and that the video helped to clarify what the written instructions were lacking. It was also mentioned that they enjoyed the fact that the steps were described to them as they were watching the skills being demonstrated.

There were some limitations to this study. The fact that all participants were staff members in a classroom where they are taught to teach students using the discrete trial training method which indicates that the participants were already able to collect specific data and use systematic instruction. This skill set may have contributed to their ability to quickly grasp how to conduct the preference assessment. Other limitations to this study are the facts that it only look at staff acquisition of a single preference assessment, and that the study was a short term study without a follow-up phase. A final limitation to this study was the fact that written instructions were given to participant during the baseline phase. While this was done to model the methods used in previous studies in this area, the written instructions did influence participants' ability to conduct the assessment due to the number of participants who met criterion without needing treatment which did have an impact on this study.

Because of this, a suggestion for future research would be to change methods used in baseline by only giving participants theory knowledge of preference assessments and no information on how to conduct them. It may also be interesting for future research to look at the effects of giving highly specific written instructions to participants to see if

written instructions alone can be sufficient enough to teach how to conduct a preference assessment. This study has shown that high intensity instruction is not needed for staff members to learn a new skill with good treatment fidelity. This information leads to question what other skills can be taught to staff members using simple teaching techniques. It is suggested that future research should investigate the effects of video modeling alone on staff member skill acquisition for other preference assessments as well as other areas where staff members need to learn key skills. It is also suggested that future research extend this research in order to learn if the effects of the treatment remain high over a longer period of time. Additionally, future research should investigate the benefit of training staff members to identify when it is the best time to conduct the various different preference assessments as each assessment can serve a slightly different purpose for identifying reinforcers. Finally, while the video model used had adults role playing the different scenarios, participants indicated on the survey that they felt that it would have been beneficial to include segments of the assessment being conducted with actual students since students behave differently than adults even in play acting. This might be an area that future research would want to look at to see what type of video model is most helpful for participants--role play or real life scenarios.

REFERENCES

- Carr, J. E., Nicolson, A. C., & Higbee, T. S. (2000). Evaluation of a brief multiple-stimulus preference assessment in a naturalistic context. *Journal of Applied Behavior Analysis, 33*, 353-357.
- Catania, C. N., Almeida, D., Liu-Constant, B., & Digennaro Reed, F. D. (2009). Video modeling to train staff to implement discrete-trial instruction. *Journal of Applied Behavior Analysis, 42*, 387-392.
- Collins, S., Higbee, T. S., & Salzberg, C. L. (2009). The effects of video modeling on staff implementation of a problem-solving intervention with adults with developmental disabilities. *Journal of Applied Behavior Analysis, 42*, 849-854.
- Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis*. Upper Saddle River, NJ: Pearson.
- DeLeon, I. G., & Iwata, B. A. (1996). Evaluation of a multiple-stimulus presentation format for assessing reinforcers preferences. *Journal of Applied Behavior Analysis, 29*, 519-532.
- Fisher, W. W., Piazza, C. C., Bowman, L. G., Hogopian, L. P., Owens, J. C., & Slevin, I. (1992). A comparison of two approaches for identifying reinforcers for persons with severe and profound disabilities. *Journal of Applied Behavior Analysis, 25*, 491-498.
- Haberlin, A. T., Beauchamp, K., Agnew, J., & O'Brien, F. (2012). A comparison of pyramidal staff training and direct staff training in community-based day programs. *Journal of Organizational Behavior Management, 32*, 65-74.

- Individuals with Disabilities Education Improvement Act, P.L. 108-446, H. R. 1350, 108th Congress (2004).
- Jahr, E. (1998). Current issues in staff training. *Research in Developmental Disabilities, 19*, 73-87.
- Lavie, T., & Sturmey, P. (2002). Training staff to conduct a paired-stimulus preference assessment. *Journal of Applied Behavior Analysis, 35*, 209-211.
- Moore, J. W., & Fisher, W. W. (2007). The effects of videotape modeling on staff acquisition of functional analysis methodology. *Journal of Applied Behavior Analysis, 40*, 197-202.
- Roane, H. S., Vollmer, T. R., Ringdahl, J. E., & Marcs, B. A. (1998). Evaluation of a brief stimulus preference assessment. *Journal of Applied Behavior Analysis, 31*, 605-620.
- Roscoe, E. M., & Fisher, W. W. (2008) Evaluation of an efficient method for training staff to implement stimulus preference assessments. *Journal of Applied Behavior Analysis, 41*, 249-254.
- Roscoe, E. M., Fisher W. W, Glover A. C., & Volkert, V. M. (2006) Evaluating the relative effects of feedback and contingent money for staff training of stimulus preference assessments. *Journal of Applied Behavior Analysis, 39*, 63-77.
- Windsor, J., Piche, L. M., & Locke, P. A. (1994). Preference testing: A comparison of two presentation methods. *Research in Developmental Disabilities, 15*, 439-455.

APPENDICES

Appendix A

Preference Assessment Data Sheet

Student: _____ Assessed By: _____
 Date: _____ Time: _____

	Rank by Trial				
Stimulus Items	1	2	3	Sum of 1,2,& 3	Overall Rank (Smallest sum is #1)
New Item					

Student: _____ Assessed By: _____
 Date: _____ Time: _____

	Rank by Trial				
Stimulus Items	1	2	3	Sum of 1,2,& 3	Overall Rank (Smallest sum is #1)
New Item					

Student: _____ Assessed By: _____
 Date: _____ Time: _____

	Rank by Trial				
Stimulus Items	1	2	3	Sum of 1,2,& 3	Overall Rank (Smallest sum is #1)
New Item					

Appendix B

Directions to Conduct the Multiple Stimulus Without Replacement Preference Assessment

To complete this preference assessment, place items in front of student. Give the student the direction to choose one and allow student to make a choice. Once a choice is made allow student to engage/consume item and lay out remaining items and ask student to choose one. Do not allow student to access more than one item. Repeat until all items have been chosen. Mark datasheet by indicating the sequence that each item was chosen. Once all items have been chosen, place all items back out and repeat choice making process until all items have been chosen. Repeat this one more time for a total of three complete trials. Add up the sequence number that each item was chosen across the three trials. Lowest number is highly preferred and highest number is less preferred.